VITAE -- STEPHEN A. WOLBERS

April 3, 2013

Title:	Scientist II Fermilab MS 369 Scientific Computing Division P.O. Box 500 Batavia, IL 60510
Birth Place:	Sheldon, IA, USA.

EDUCATION

Undergraduate:	A.B. Degree, 1978, U.C. Berkeley (Math and Physics)
Graduate:	M.A. Degree, 1980, U.C. Berkeley (Physics) Ph.D. Degree, December, 1984, U.C. Berkeley (Physics)
Ph.D. Advisor:	Harry H. Bingham (deceased)
Thesis Title:	Inclusive Photoproduction of Strange Baryons at 20 GeV.

POSITIONS HELD

Scientific Appointments:

May 1, 1998 – present	Scientist II, Fermilab
October, 1994 -- May 1, 1998	Scientist I, Fermilab
July, 1989 -- October, 1994	Associate Scientist, Fermilab
January, 1985 -- July, 1989	Research Associate, Fermilab
June, 1980 -- December, 1984	Research Assistant, U.C. Berkeley
September, 1978 -- June, 1980	Teaching Assistant, U.C. Berkeley

Management Appointments:

April, 1991 -- February, 1994	Group Leader, Farms Group, Computing Division
February, 1994 -- December 31, 1996	Head, OSS Department, Computing Division
January 1, 1997 -- June 30, 1998	Deputy Head, Computing Division
July 1, 1998 -- September 30, 1998	Acting Head, Computing Division
October 1, 1998 -- October 31, 2002	Deputy Head, Computing Division
November 1, 2002 -- August 31, 2005	Associate Computing Division Head, Financials and Projects
September 1, 2005 – November 30, 2006	Head, CEPA Department, Computing Division
December 1, 2006 – March 31, 2008	Associate Computing Division Head, ILC and Future Programs, CD Liaison to ILC program at Fermilab
April 1, 2008 – January, 2012	Associate Computing Division Head, Scientific Computing Facilities
January, 2012 – Present	Associate Head, Scientific Computing Division

Project Appointments:

August 1, 2003 -- July 1, 2005	Project Manager, Tevatron BPM Upgrade Project
July 1, 2005 – October 31, 2006	Project Manager, Main Injector BPM Upgrade Project

EXPERIMENTAL AFFILIATION

1980 – 1984	SLAC Experiment BC 72/73/75/76
1985 – 2001	Fermilab Experiment E665
1997 – Present	Fermilab Experiment CDF
2012 – Present	Fermilab Experiment MicroBooNE

Member, APS and ACM.

AWARDS

Employee Performance Recognition Award (EPRA):

2002: For service as Deputy Head and Acting Head of the Computing Division
2005: For leading the Tevatron BPM Upgrade Project

Home Page: home.fnal.gov/~wolbers

6 Recent Publications

S. Wolbers, "QCD and Heavy Quark Physics at the Tevatron", proceedings of the PLHC 2012 Conference, Vancouver, Canada, June 4-9, 2012. Fermilab-Conf-12-502.

Z. Akopov, et al., "Status Report of the DPHEP Study Group: Towards a Global Effort for Sustainable Data Preservation in High Energy Physics", arXiv:1205.4667, May 2012.

G. Annala, et al., "Tevatron Beam Position Monitor Upgrade", arXiv:1209.5983,
Published in **JINST 6 (2011) T11005.**

T. Aaltonen, et al., "Higgs Boson Studies at the Tevatron", FERMILAB-PUB-13-081-E arXiv:1303.6346, submitted to PRD.

T. Aaltonen, et al., "Search for B_s->mu+mu- and B_d->mu+mu- decays with the full CDF Run II data set", FERMILAB-PUB-13-034, arXiv:1301.7048, submitted to PRD.

T. Aaltonen, et al., "Measurement of the B_c- meson lifetime in the decay B_c- -> J/Psi pi-",
Phys.Rev. D87 (2013) 011101

Recent Presentations

"Joint CDF/D0/SCD Data Preservation Project", DPHEP workshop, Marseille, France, November 19-21, 2012. CS-docdb-4965. https://indico.cern.ch/conferenceDisplay.py?confId=209688

"QCD and Heavy Quark Physics at the Tevatron", Stephen Wolbers (Fermilab), Sep 2012. 6 pp. FERMILAB-CONF-12-502

Recent Committee and Review assignments

Snowmass Community Study, 2012-2013, Computing Frontier, Intensity Frontier

US ATLAS Detector Advisory Panel

Data Preservation and Long Term Analysis in HEP international study group

Visiting Committee and Evaluation Committee, CC-IN2P3

CHEP2013 International Advisory Committee

Recent Training

ITIL Foundations Training, March, 2013.

Principal Achievements 2011-2013

Scientific:

CDF:

During this past year my contributions to physics have included the following. First, I stood shifts at CDF as often as I could and as often as they are needed by CDF.

Second, I attend and contribute to B physics meetings at CDF. The group is shrinking as people move on to LHC experiments and/or move away from Fermilab to their home institutions. I will not claim to have a major contribution here but every little bit at this point of the experiment helps to get the physics done.

I serve as godparent for as many analyses as I have time for. During the past year this included at least two papers. The most recent paper, now published, was the Bc lifetime measurement.

I also prepared and gave a plenary talk at PLHC 2012 – the first physics talk that I have given in many years. It was a large effort to prepare and I learned much about the CDF and D0 analysis that I was asked to cover, including QCD physics that I do not normally keep up with. It took some effort to communicate with all the conveners in the two experiments the 4 physics groups to pull the talk together.

MicroBooNE:

I joined MicroBooNE in November, 2012. Since that time I have been working my way into the collaboration in various ways. I worked with Ben Carls and Herb Greenlee on the organization of the first Monte Carlo challenge, which Herb set up and Ben ran in late 2012. I wrote a note that documented the production and the data sets. I have set up some meetings with the collaboration and the REX department and others in the Computing Sector. This includes meetings focused on data handling as well as one that was primarily targeted at the connectivity of the LArTF building, which will house the MicroBooNE experiment. I also have coordinated activity related to the DAQ system, including the sharing of the system administration.

Management:

Most of my time is devoted to organizational and management matters. I currently serve as leader of the Scientific Computing Facilities "Quadrant" in SCD, consisting of five departments devoted primarily to providing large scientific computing to the experiments, projects and theoretical communities associated with Fermilab.

One issue that I constantly work on is a push toward commonality in the quadrant. This encompasses software, tools, procedures, hardware, and architecture, interconnects, etc. This goal is not only difficult to achieve but it may in fact be undesirable in some ways. The ability to seek out and try new approaches is at the very heart of computing today and has been for as long as I can remember. Forcing too much commonality might have the unanticipated consequence of freezing

the quadrant into outdated and/or less than optimal approaches. However, the ability to work with equally modern and effective tools in areas where there is no value added to going it alone needs to be recognized and encouraged whenever possible. This includes system management, disk systems and file systems, batch systems, worker nodes, servers, tapedrives, etc.

I spent time on setting up task forces and committees to study storage issues, to coordinate disk purchases and to organize and purchase worker nodes. In reality Ruth has stepped in and has coordinated many of these cross-department and cross-sector discussions and reviews. These are useful and do expose some of the issues involved in such a wide-ranging organization.

I encourage departments to think creatively to use resources well and to bring in additional resources whenever possible. Such a thing occurred when Gabriele brought in two visitors from KISTI to collaborate with Fermilab on many grid and cloud issues. This is something I think that the lab benefits greatly from and I hope that we can do more in the future to show that Fermilab is a welcoming place for people all over the world.

The quadrant is fully engaged in ITIL. This year SCF is working with the Service Manager to onboard services into ITIL. We are going to learn how much effort it takes to do this as well as the benefit and the ability to fit some of the scientific services into this framework.

I conduct monthly meetings with the "leaders" of the SCF quadrant which includes all department heads, associate, assistant and deputy heads, group leaders – basically anyone with some sort of management role. These are quite well attended and give everyone a chance to speak and to hear about all the many things going on during the year including safety, changes to the organization, budget, reviews, conferences, projects, etc. I keep them short and to the point and find that they work well.

***Service Work/External Committees**:*

I am participating in more lab and external committees. The following I think cover most of them:

Snowmass Community Study:

I am formally a member of the Computing Frontier/Intensity Frontier subgroup of the Snowmass 2013 Community Study. My official role is that of Observer and I work with the conveners Brian Rebel and Mayly Sanchez. The main role is to collect information from the currently running and future Intensity Frontier experiments and to understand how the computing needs of those experiments can be categorized and possibly met in the future. This is all being done in the context of a much larger effort to discuss and document all of the relevant frontiers for planning for the future of the field.

US Atlas Detector Advisory Panel:

I continue to serve on the US ATLAS Project Manager's Review and this year we met January 30-31, 2013. As usual it was interesting to see what the experiment and the US ATLAS program is engaged in and to hopefully help to contribute to the continued success of the program.

Membership in the Data Preservation and Long Term Data Analysis in HEP Workshop(s):

I attended the 6th workshop, held in Marseille, France in November 2012. I gave a talk about Fermilab's joint CDF/D0/CS preservation project and of course attended and contributed to the discussions about the future directions of the DPHEP organization. The organization has been reconstituted, still nominally reporting to and charged by IFCA, but now led by Jamie Shiers of CERN for 3 years. A new collaboration agreement has been written and approximately monthly meetings are being held (video/phone conferences). I have been attending the monthly meetings and will try to shepherd the collaboration agreement through Fermilab when it is ready for signature.

IN2P3 Review:

I attended the yearly visiting committee/review of the CC-IN2P3 computing center in December 2012. As usual it is extremely useful for me to see the facilities of another large HEP computing facility with rather similar requirements but somewhat different solutions to dealing with them. As is usual budget, technology choices, and operational issues, were all big issues.

Ask-a-Scientist

I usually work once/year at a Sunday Ask-a-Scientist event at Fermilab. This year Heidi and I worked at the lab open house in February.

CHEP 2013 coordination IAC and local coordination:

I am a member of the CHEP2013 International Advisory Committee, as are many others in CS. This mainly involves participating in email and phone-conferences to plan the CHEP2013 conference, the track coordinators and tracks, and the invited speakers. I think primarily due to the efforts of Adam Lyon, Panagiotis Spentzouris and Lothar Bauerdick Fermilab is fairly well represented in the coordination and invited speakers. I have been pushing to get as many abstracts submitted as possible and reasonable. I will likely help to coordinate practice talks and then to ensure that the proceedings are written and submitted.

PUBLICATIONS LIST

CDF (2012-2013)

1) Higgs Boson Studies at the Tevatron.
By CDF and D0 Collaborations (T. Aaltonen et al.).
[arXiv:1303.6346 [hep-ex]].

2) Measurement of R = \boldmath${\mathcal{B}(t \rightarrow Wb)/\mathcal{B}(t \rightarrow Wq)} $ in Top--quark--pair Decays using Lepton+jets Events and the Full CDF Run II Data set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1303.6142 [hep-ex]].

3) Measurement of the cross section for direct-photon production in association with a heavy quark in $p\bar{p}$ collisions at $\sqrt{s}$ = 1.96 TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1303.6136 [hep-ex]].

4) Search for pair-production of strongly-interacting particles decaying to pairs of jets in $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1303.2699 [hep-ex]].
Submitted to: Phys.Rev.Lett..

5) Search for Supersymmetry with Like-Sign Lepton-Tau Events at CDF.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1302.4491 [hep-ex]].

6) Search for $B_s \rightarrow \mu^{+}\mu^{-}$ and $B_d \rightarrow \mu^{+}\mu^{-}$ decays with the full CDF Run II data set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1301.7048 [hep-ex]].

7) Combination of searches for the Higgs boson using the full CDF data set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1301.6668 [hep-ex]].

8) Updated search for the standard model Higgs boson in events with jets and missing transverse energy using the full CDF data set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1301.4440 [hep-ex]].
10.1103/PhysRevD.87.052008.

9) Measurement of the cross section for prompt isolated diphoton production using the full CDF Run II data sample.
By CDF Collaboration (T. Aaltonen et al.).

[arXiv:1212.4204 [hep-ex]].
10.1103/PhysRevLett.110.101801.
Phys.Rev.Lett. 110 (2013) 101801.

10) Search for a two-Higgs-boson doublet using a simplified model in $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1212.3837 [hep-ex]].

11) Search for Resonant Top-antitop Production in the Semi-leptonic Decay Mode Using the Full CDF Data Set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1211.5363 [hep-ex]].
10.1103/PhysRevLett.110.121802.

12) Measurement of W-Boson Polarization in Top-quark Decay using the Full CDF Run II Data Set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1211.4523 [hep-ex]].
10.1103/PhysRevD.87.031104.
Phys. Rev. D 87, 03110 (R) (2013).

13) Measurement of the top quark forward-backward production asymmetry and its dependence on event kinematic properties.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1211.1003 [hep-ex]].

14) Measurement of the Mass Difference Between Top and Anti-top Quarks at CDF.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1210.6131 [hep-ex]].

15) Search for a heavy vector boson decaying to two gluons in $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1210.5686 [hep-ex]].
10.1103/PhysRevD.86.112002.
Phys.Rev. D86 (2012) 112002.

16) Measurement of the B_c^{-} meson lifetime in the decay $B_{c}^{-} \rightarrow J/\psi~\pi^{-}$.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1210.2366 [hep-ex]].
10.1103/PhysRevD.87.011101.
Phys.Rev. D87 (2013) 011101.

17) Observation of the Production of a W Boson in Association with a Single Charm Quark.

By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1209.1921 [hep-ex]].
Phys.Rev.Lett. 110 (2013) 071801.

18) QCD and Heavy Quark Physics at the Tevatron.
By CDF Collaboration (Stephen Wolbers for the collaboration).

19) Search for the Higgs boson in the all-hadronic final state using the full CDF data set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1208.6445 [hep-ex]].
10.1007/JHEP02(2013)004.
JHEP 1302 (2013) 004.

20) Measurements of the Top-quark Mass and the $t\bar{t}$ Cross Section in the Hadronic $\tau +$ Jets Decay Channel at $\sqrt{s} = 1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1208.5720 [hep-ex]].
10.1103/PhysRevLett.109.192001.
Phys.Rev.Lett. 109 (2012) 192001.

21) Measurement of the Bottom-Strange Meson Mixing Phase in the Full CDF Data Set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1208.2967 [hep-ex]].
10.1103/PhysRevLett.109.171802.
Phys.Rev.Lett. 109 (2012) 171802.

22) Search for the standard model Higgs boson produced in association with top quarks using the full CDF data set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1208.2662 [hep-ex]].
10.1103/PhysRevLett.109.181802.
Phys.Rev.Lett. 109 (2012) 181802.

23) Transverse momentum cross section of e^+e^- pairs in the Z-boson region from $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1207.7138 [hep-ex]].
10.1103/PhysRevD.86.052010.
Phys.Rev. D86 (2012) 052010.

24) Precision Top-Quark Mass Measurements at CDF.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1207.6758 [hep-ex]].
10.1103/PhysRevLett.109.152003.
Phys.Rev.Lett. 109 (2012) 152003.

25) Evidence for a particle produced in association with weak bosons and decaying to a bottom-antibottom quark pair in Higgs boson searches at the Tevatron.
By CDF and D0 Collaborations (T. Aaltonen et al.).
[arXiv:1207.6436 [hep-ex]].
10.1103/PhysRevLett.109.071804.
Phys.Rev.Lett. 109 (2012) 071804.

26) Search for a Higgs boson in the diphoton final state using the full CDF data set from proton-antiproton collisions at $\surd{s} = 1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1207.6386 [hep-ex]].
10.1016/j.physletb.2012.08.051.
Phys.Lett. B717 (2012) 173-181.

27) Novel inclusive search for the Higgs boson in the four-lepton final state at CDF.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1207.5016 [hep-ex]].
10.1103/PhysRevD.86.099902, 10.1103/PhysRevD.86.072012.
Phys.Rev. D86 (2012) 072012.

28) Search for Neutral Higgs Bosons in Events with Multiple Bottom Quarks at the Tevatron.
By CDF and D0 Collaborations (T. Aaltonen et al.).
[arXiv:1207.2757 [hep-ex]].
10.1103/PhysRevD.86.091101.
Phys.Rev. D86 (2012) 091101.

29) Measurement of the difference of CP--violating asymmetries in $D^0 \to K^+K^-$ and $D^0 \to \pi^+\pi^-$ decays at CDF.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1207.2158 [hep-ex]].
10.1103/PhysRevLett.109.111801.
Phys.Rev.Lett. 109 (2012) 111801.

30) Search for the standard model Higgs boson decaying to a $b\bar{b}$ pair in events with no charged leptons and large missing transverse energy using the full CDF data set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1207.1711 [hep-ex]].
10.1103/PhysRevLett.109.111805.
Phys.Rev.Lett. 109 (2012) 111805.

31) Combined search for the standard model Higgs boson decaying to a bb pair using the full CDF data set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1207.1707 [hep-ex]].
10.1103/PhysRevLett.109.111802.
Phys.Rev.Lett. 109 (2012) 111802.

32) Search for the standard model Higgs boson decaying to a bb pair in events with two oppositely-charged leptons using the full CDF data set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1207.1704 [hep-ex]].
10.1103/PhysRevLett.109.111803.
Phys.Rev.Lett. 109 (2012) 111803.

33) Search for the standard model Higgs boson decaying to a bb pair in events with one charged lepton and large missing transverse energy using the full CDF data set.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1207.1703 [hep-ex]].
10.1103/PhysRevLett.109.111804.
Phys.Rev.Lett. 109 (2012) 111804.

34) Combination of the top-quark mass measurements from the Tevatron collider.
By CDF and D0 Collaborations (T. Aaltonen et al.).
[arXiv:1207.1069 [hep-ex]].
10.1103/PhysRevD.86.092003.
Phys.Rev. D86 (2012) 092003.

35) Measurement of CP-violation asymmetries in $D^0 \to K_S \pi^+ \pi^-$.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1207.0825 [hep-ex]].
10.1103/PhysRevD.86.032007.
Phys.Rev. D86 (2012) 032007.

36) Search for the standard model Higgs boson produced in association with a $W^{\pm}$ boson with 7.5 fb^{-1} integrated luminosity at CDF.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1206.5063 [hep-ex]].
10.1103/PhysRevD.86.032011.
Phys.Rev. D86 (2012) 032011.

37) Diffractive Dijet Production in $\bar{p}p$ Collisions at $\sqrt{s}=1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1206.3955 [hep-ex]].
10.1103/PhysRevD.86.032009.
Phys.Rev. D86 (2012) 032009.

38) Status Report of the DPHEP Study Group: Towards a Global Effort for Sustainable Data Preservation in High Energy Physics.
By DPHEP Study Group Collaboration (Zaven Akopov et al.).
[arXiv:1205.4667 [hep-ex]].

39) W boson polarization measurement in the $t\bar{t}$ dilepton channel using the CDF II

Detector.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1205.0354 [hep-ex]].

40) Measurement of $B_s^0 \to D_s^{(*)+} D_s^{(*)-}$ Branching Ratios.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1204.0536 [hep-ex]].
10.1103/PhysRevLett.108.201801.
Phys.Rev.Lett. 108 (2012) 201801.

41) Search for the standard model Higgs boson produced in association with a Z Boson in 7.9 fb(-1) of p anti-p collisions at $\sqrt{s} = 1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1203.5815 [hep-ex]].
10.1016/j.physletb.2012.07.045.
Phys.Lett. B715 (2012) 98-104.

42) Search for Scalar Top Quark Production in $p\bar{p}$ Collisions at $\sqrt{s}=1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1203.4171 [hep-ex]].
10.1007/JHEP10(2012)158.
JHEP 1210 (2012) 158.

43) Search for a heavy particle decaying to a top quark and a light quark in $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1203.3894 [hep-ex]].
10.1103/PhysRevLett.108.211805.
Phys.Rev.Lett. 108 (2012) 211805.

44) A Search for dark matter in events with one jet and missing transverse energy in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1203.0742 [hep-ex]].
10.1103/PhysRevLett.108.211804.
Phys.Rev.Lett. 108 (2012) 211804.

45) Precise measurement of the W-boson mass with the CDF II detector.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1203.0275 [hep-ex]].
10.1103/PhysRevLett.108.151803.
Phys.Rev.Lett. 108 (2012) 151803.

46) Measurement of the WZ Cross Section and Triple Gauge Couplings in $p \bar p$ Collisions at $\sqrt{s} = 1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).

[arXiv:1202.6629 [hep-ex]].
10.1103/PhysRevD.86.031104.
Phys.Rev. D86 (2012) 031104.

47) Search for a dark matter candidate produced in association with a single top quark in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1202.5653 [hep-ex]].
10.1103/PhysRevLett.108.201802.
Phys.Rev.Lett. 108 (2012) 201802.

48) Combination of CDF and D0 measurements of the W boson helicity in top quark decays.
By CDF and D0 Collaborations (T. Aaltonen et al.).
[arXiv:1202.5272 [hep-ex]].
10.1103/PhysRevD.85.071106.
Phys.Rev. D85 (2012) 071106.

49) Search for anomalous production of multiple leptons in association with W and Z bosons at CDF.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1202.1260 [hep-ex]].
10.1103/PhysRevD.85.092001.
Phys.Rev. D85 (2012) 092001.

50) Search for a low mass Standard Model Higgs boson in the $\tau-\tau$ decay channel in $p\bar{p}$ collisions at $\sqrt{s}$ = 1.96 TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1201.4880 [hep-ex]].
10.1103/PhysRevLett.108.181804.
Phys.Rev.Lett. 108 (2012) 181804.

51) Measurement of the Top Quark Mass in the All-Hadronic Mode at CDF.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1112.4891 [hep-ex]].
10.1016/j.physletb.2012.06.007.
Phys.Lett. B714 (2012) 24-31.

52) Search for Standard Model Higgs Boson Production in Association with a W Boson Using a Matrix Element Technique at CDF in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1112.4358 [hep-ex]].
10.1103/PhysRevD.85.072001.
Phys.Rev. D85 (2012) 072001.

53) Measurement of the branching fraction ${\mathcal{B}}(\Lambda^0_b\rightarrow \Lambda^+_c\pi^-\pi^+\pi^-)$ at CDF.

By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1112.3334 [hep-ex]].
10.1103/PhysRevD.85.032003.
Phys.Rev. D85 (2012) 032003.

54) Measurement of the masses and widths of the bottom baryons Σ_b^{+-} and Σ_b^{*+-}.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1112.2808 [hep-ex]].
10.1103/PhysRevD.85.092011.
Phys.Rev. D85 (2012) 092011.

55) Measurement of ZZ production in leptonic final states at $\surd{s}$ of 1.96 TeV at CDF.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1112.2978 [hep-ex]].
10.1103/PhysRevLett.108.101801.
Phys.Rev.Lett. 108 (2012) 101801.

56) Search for Standard Model Higgs Boson Production in Association with a W Boson at CDF.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1112.1930 [hep-ex]].
10.1103/PhysRevD.85.052002.
Phys.Rev. D85 (2012) 052002.

57) Measurement of the CP-Violating Phase $\beta_s^{J/\Psi\phi}$ in $B^0_s \to J/\Psi \phi$ Decays with the CDF II Detector.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1112.1726 [hep-ex]].
10.1103/PhysRevD.85.072002.
Phys.Rev. D85 (2012) 072002.

58) Measurements of Angular Distributions of Muons From Υ Meson Decays in $p\bar{p}$ Collisions at $\sqrt{s}=1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1112.1591 [hep-ex]].
10.1103/PhysRevLett.108.151802.
Phys.Rev.Lett. 108 (2012) 151802.

59) Search for new phenomena in events with two Z bosons and missing transverse momentum in $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1112.1577 [hep-ex]].
10.1103/PhysRevD.85.011104.
Phys.Rev. D85 (2012) 011104.

60) Observation of Exclusive Gamma Gamma Production in $p \bar{p}$ Collisions at

$\sqrt{s}=1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1112.0858 [hep-ex]].
10.1103/PhysRevLett.108.081801.
Phys.Rev.Lett. 108 (2012) 081801.

61) Measurement of CP--violating asymmetries in $D^0\to\pi^+\pi^-$ and $D^0\to K^+K^-$ decays at CDF.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1111.5023 [hep-ex]].
10.1103/PhysRevD.85.012009.
Phys.Rev. D85 (2012) 012009.

62) An additional study of multi-muon events produced in $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1111.5242 [hep-ex]].
10.1016/j.physletb.2012.02.081.
Phys.Lett. B710 (2012) 278-283.

63) Search for high-mass resonances decaying into ZZ in p$\bar{p}$ collisions at $\sqrt{s}=1.96$\,TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1111.3432 [hep-ex]].
10.1103/PhysRevD.85.012008.
Phys.Rev. D85 (2012) 012008.

64) Evidence for the charmless annihilation decay mode $B^0_s \to \pi^+\pi^-$.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1111.0485 [hep-ex]].
10.1103/PhysRevLett.108.211803.
Phys.Rev.Lett. 108 (2012) 211803.

65) Search for a Higgs Boson in the Diphoton Final State in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1109.4427 [hep-ex]].
10.1103/PhysRevLett.108.011801.
Phys.Rev.Lett. 108 (2012) 011801.

66) Search for heavy metastable particles decaying to jet pairs in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1109.3136 [hep-ex]].
10.1103/PhysRevD.85.012007.
Phys.Rev. D85 (2012) 012007.

67) Search for $WZ+ZZ$ production with MET + jets with b enhancement at $\sqrt{s} = 1.96$~TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1108.2060 [hep-ex]].
10.1103/PhysRevD.85.012002.
Phys.Rev. D85 (2012) 012002.

68) Measurements of the Angular Distributions in the Decays $B \to K^{(*)} \mu^+ \mu^-$ at CDF.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1108.0695 [hep-ex]].
10.1103/PhysRevLett.108.081807.
Phys.Rev.Lett. 108 (2012) 081807.

69) Study of Substructure of High Transverse Momentum Jets Produced in Proton-Antiproton Collisions at $\sqrt{s}=1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1106.5952 [hep-ex]].
10.1103/PhysRevD.85.091101.
Phys.Rev. D85 (2012) 091101.

70) Search for Higgs Bosons Produced in Association with b-quarks.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1106.4782 [hep-ex]].
10.1103/PhysRevD.85.032005.
Phys.Rev. D85 (2012) 032005.

71) Search for the Rare Radiative Decay: $W\rightarrow\pi\gamma$ in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1104.1585 [hep-ex]].
10.1103/PhysRevD.85.032001.
Phys.Rev. D85 (2012) 032001.

72) Production of Λ, $\bar{\Lambda}^0$ $\Xi^{\pm}$ and $\Omega^{\pm}$ Hyperons in $p \bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV.
By CDF Collaboration (T. Aaltonen et al.).
[arXiv:1101.2996 [hep-ex]].
10.1103/PhysRevD.86.012002.
Phys.Rev. D86 (2012) 012002.

E665 (23 Publications)
1990-2000

BC72/73 (14 Publications)

(1982-1991)

COMPUTING

DHPEP Study Group, **Data Preservation in High Energy Physics**,
e-Print: **arXic:0912.0255v1**, December 1, 2009

Scenarios for long-term analysis.
Stephen Wolbers, (Fermilab) . FERMILAB-CONF-09-073-CD, Jan 2009. 5pp.
Presented at 1st Workshop on Data Preservation and Long Term Analysis in HEP, DESY, Hamburg, Germany, 26-28 Jan 2009.

A multi-purpose computing center: FNAL.
Stephen Wolbers, (Fermilab) . FERMILAB-CONF-09-072-CD, Jan 2009. 6pp.
Presented at 1st Workshop on Data Preservation and Long Term Analysis in HEP, DESY, Hamburg, Germany, 26-28 Jan 2009.

Baranovski *et al.* **"**CDF II production farm project**",** FERMILAB-PUB-06-437-E, Dec 2006.
Published in **Nucl.Instrum.Meth.A572:399-401,2007**.

J. Antos *et al.*. **"**Data processing model for the CDF experiment"**.** FERMILAB-PUB-06-169-CD-E, Jun 2006.
Published in **IEEE Trans.Nucl.Sci.53:2897-2906,2006**.
e-Print: **physics/0606042**

J.Antos *et al*., ``Data production models for the CDF experiment," arXiv:physics/0606039.

`Design and First Tests of the CDF Run 2 Farms', Jaroslav Antos, *et al.*, presented at CHEP2000, Padova, Italy, Febrary 7-11, 2000 (FERMILAB-Conf-00/095), Comp. Phys. Comm. **140**: 239 (2001).

Stephen Wolbers, Strategic Directions of Computing at Fermilab, Comp. Phys. Comm. **110**: 1285 (1998).

R. Cudzewicz, *et al.*, Next Generation Farms at Fermilab, Computer Physics Communications **110**: 1317 (1998).

Elizabeth Anderson, *et al.*, A Virtual Library of Technical Publications, Presented at 6th International World Wide Web Conference, Santa Clara, CA 7-12 Apr, 1997 and at Inforum'97, Oak Ridge TN, 6-8 May, 1997, FERMILAB-TM-2004-REV, October, 1997.

Frank Rinaldo, Stephen Wolbers, Loosely Coupled Parallel Processing at Fermilab, Computers in Physics, Vol **7**, 184-190 (March/April, 1993). FERMILAB-Pub-93-006.

ACCELERATOR (5 publications, 2005-2007)

G. Annala, et al., “Tevatron Beam Position Monitor Upgrade”, arXiv:1209.5983, Published in **JINST 6 (2011) T11005.**

INTERNAL NOTES

ACCELERATOR INSTRUMENTATION
(39 Documents, found in Fermilab beams-doc-DB)

CDF Notes
(23 documents, found in CDF notes)

GENERAL COMPUTING NOTES
(80 Notes in CD-doc-DB + 9 notes in Fermilab Publications System)

E665
(160 Notes, 1985-1996)

BC 72/73
(25 Notes, 1980-1984)

RECENT CONFERENCE/SEMINAR PRESENTATIONS

"Joint CDF/D0/SCD Data Preservation Project", DPHEP workshop, Marseille, France, November 19-21, 2012. CS-docdb-4965. https://indico.cern.ch/conferenceDisplay.py?confId=209688

"QCD and Heavy Quark Physics at the Tevatron", Stephen Wolbers (Fermilab), Sep 2012. 6 pp. FERMILAB-CONF-12-502

'Lustre File System Evaluation at FNAL', CHEP2009, Prague, Czech Republic, March 21-27, 2009.

'A Multi-Purpose Computing Center : FNAL', First Workshop on Data Preservation and Long Term Data Analysis in High Energy Physics, DESY, January 26-28, 2009.

'Scenarios for Long-Term Data Analysis', First Workshop in Data Preservation and Long Term Data Analysis in High Energy Physics, DESY, January 26-28, 2009.

COMMITTEE, CONFERENCE AND REVIEW ASSIGNMENTS

1. Member, 8mm/Serial Media Working Group, Computing Division, 1990.

2. Member, Word Processing Subcommittee, 1985.

3. Member, Ad-Hoc Committee on the Common File Server, 1989.

4. Member, SDSS software review, 1992 and 1996.

5. Member and co-leader, Fermilab Publications Fileserver Committee 1995-present

6. Member, CDF godparents review committee: Upgrade Software, 1996.

7. Member, Fermilab Computer Security Working Group, 1998-2002.

8. Member, Run II Joint CDF/D0/CD Committee 1996-2002.

9. Member, LHCC Consultants Group (LCG) to review Computing for the LHC experiments, January, 1997 -- January, 2000*.

10. Member, RHIC Computing Review Committee, 1997-2000*.

11. Member, Fermilab Policy Manual Working Group, 1998.

12. Chair, Fermilab BSS Critical Systems Working Group, June-December, 1999.

13. Chair, Fermilab Beams Critical Systems Working Group, June-December, 1999.

14. Member, Brookhaven US ATLAS Project Advisory Panel, Jan, 2000-present*.

15. Organizer, NSS Conference, Lyon, France, October, 2000.*

16. Co-convener, Commodity Hardware and Software Session, CHEP2000, Padova, Italy, February, 2000.

17. Co-convener, Commodity Hardware and Software Session, CHEP2001, Beijing, China, 3-7 Sept, 2001.

18. Member, Compensation Committee (headed by Kay Van Vreede of Lab Services), Feb, 2000 to early 2001.

19. Member, Organizing Committee for the Fermi Centennial (headed by Chris Quigg and Jeff Appel), May, 2001-September, 2001.

20. Member, URA Thesis Award Committee, 2002-2006.

21. Chair, URA Thesis Award Committee, 2003-2006.

22. Member, Run 2 committee, 2002.

23. Member, many Associate Scientist (CD) search committees.

24. Member, High Risk Property Committee (FNAL), 2004-present.

25. Chair, Commodity Node Procurement Task Force (CD), 2005.

26. Member, Fermilab Committee on Scientific Appointments, 2005-2008.
Chair, 2007-2008.

27. Member of ILC RDR effort on Controls. 2006-2007.

28. CDF godparent (publication review committee), Ratio of χ_{c2}/χ_{c1} cross sections, 2006-2007.

29. CDF godparent, chair, D^0-D^0bar mixing, 2007.

30. Member, Workforce Restructure Task Force, 2008.

31. CDF godparent, chair, B^+ -> D^0(CP) K^+ , 2008-2009.

32. Member, Task Force on Data Preservation and Long Term Data Analysis in High Energy Physics. 2009-present.*

33. Fermilab Committee for Hiring and Retaining Scientific Staff (chair) 2009. Part of the Diversity Council.

34. Member of the Evaluation and Survey Committee Committee of the IN2P3 Computing Center, 2009-present.*

35. Member of ARRA panel for DOE University HEP programs, July, 2009.

36. Chair, DOE panel on Transatlantic Networking, 2010.*

37. CDF godparent, chair, Bs->J/Psi K* and Bs->J/Psi Ks, 2010.

38. CDF godparent, chair, B- -> D0 K+ suppressed decays, 2011.

39. Chair, organizing committee, 5th Workshop on Data Preservation and Long-Term Analysis in HEP, May 16-18, 2011, Fermilab.

39. Chair, Scientific Computing Division Search Committee, 2011.

40. Snowmass 2013 community planning process,

* External Committee

TRAINING

1. Supervisory Training (for group leaders), Fermilab, January-April, 1993.

2. Fast Track to Objects, January 6, 1999.

3. C++ for non-C Programmers, January 22-March 5, 1999.

4. Leadership/Management Training, given by the MRA - the Northern Illinois Business Association, March-April, 1999.

5. Performance Appraisal Training -- Supervisors, March 7, 2002.

6. Interaction Management Training -- July 28, 2005 - October, 2005.

7. Fermilab Leadership Essentials, May 5, 2006.

8. Rad Worker Training, as needed. Last instance October 29, 2008.

9. Stress Management Training, October 10, 2007.

10. Manager and Supervisor Layoff Notification Training, April 29, 2008.

11. Managing within the law, May 7, 2009.

12. Behavioral Interviewing, May 14, 2009.

13. U. of Chicago Strategic Laboratory Leadership Program, May-November, 2010.

14. ITIL Foundations Training, March, 2013.

Numerous specific training for ergonomics, controlled access, workstation, computer security, etc.

REFERENCES

Dr. Robert Roser
MS 318
Fermilab
Batavia, IL 60510
(630)-840-5006
roser@fnal.gov

Victoria White
MS 370
Fermilab
Batavia, IL 60510
630-840-3936
white@fnal.gov

Dr. Bob Tschirhart
MS 370
Fermilab
Batavia, IL 60510
630-840-4100
tsch@fnal.gov

Dr. Patricia McBride
MS370
Fermilab
Batavia, IL 60510
630-840-8071
mcbride@fnal.gov

Dr. Matthias Kasemann
DESY
Hamburg, Germany
kasemann@fnal.gov

Dr. Joel Butler
MS 208
Fermilab
Batavia, IL 60510
(630)-840-3148
butler@fnal.gov

Dr. Hugh Montgomery
Jefferson Lab
12000 Jefferson Average
Newport News, VA 23606
(757) 269-7552
mont@jlab.org

Dr. Peter Cooper
MS 122
Fermilab
Batavia, IL 60510
(630)-840-2629
pcooper@fnal.gov